



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,036	07/14/2000	Woo Hyun Paik	0630-1127P	6100

7590 02/27/2006

Birch Stewart Kolasch & Birch LLP
P O Box 747
Falls Church, VA 22040-0747

EXAMINER	
HOYE, MICHAEL W	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/617,036

Applicant(s)

PAIK ET AL.

Examiner

Michael W. Hoye

Art Unit

2614

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☒ Other: Note the attached Notice of References Cited (PTO-892).


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

ADVISORY ACTION

Response to Arguments

Applicants' arguments filed with respect to claims 1-3, 5-6, 8-11, 13-15, 17-20, 22-29 and 31-39 have been fully considered but they are not persuasive.

Regarding the Applicants' comment on page 2 of the Remarks section that, "[the] rejection is moot with respect to claims 4 and 6, which have been canceled."

The Examiner respectfully notes that no rejection was made in the previous office action regarding canceled claim 4, in addition, claim 6 has not been canceled according to the most recent listing of the claims on record and the Examiner is unsure as to whether or not this comment may have been a typographical error.

Regarding claims 1-3, 5-6, 8-9, 36 and 38, the Applicants' argue on page 4 in the Remarks section that:

...Tracton does not teach (1) a converting unit in a television receiver for converting video and audio signals provided from moving picture information from a TV broadcast station into a format compatible with a signal and transmission standard of a mobile radio communication system, or (2) a converting unit that comprises a coding unit which codes the video and audio signals to be compatible with a digital television broadcasting system and formats the coded video and audio signals to be compatible with the mobile radio communication system.

In response, the Examiner respectfully disagrees with the Applicants. To begin with, the IEEE Authoritative Dictionary of IEEE Standards Terms provides the following definitions of terms: *television (TV)* is defined as the electric transmission and reception of transient visual images; *television broadcast station* is defined as a radio station for transmitting visual signals, and usually simultaneous aural signals, for general reception; and *television receiver* is defined

Art Unit: 2614

as a radio receiver for converting incoming electric signals into television pictures and customarily associated sound. According to the broadest reasonable interpretation of the claims, the Tracton reference clearly discloses that the original source content 250 may be a Moving Pictures Experts Group (MPEG) (MPEG is a series of hardware and software standards for digitally compressing full motion video and providing CD quality audio with playback on PCs or TVs) encoded news broadcast, which is the transmission of visual signals and usually simultaneous aural signals for general reception or a “television broadcast” that is sent to a server or “television [signal] receiver” which converts the signals into a format compatible with a signal and transmission standard of a mobile radio communication system as met by re-coding the MPEG-2 coding of the broadcast as a MPEG-1, MPEG-4, or other format/standard as needed for transmission to a cellular-phone based browser or other client based system (see col. 4, lines 33-49; col. 5, lines 58-62; col. 7, line 26 – col. 8, line 5). Tracton also discloses that output may be provided to recording devices such as video-cassette recorders (col. 9, lines 53-55), which may include the recording of television broadcast signals. Therefore, according to the broadest reasonable interpretation of the claims the Tracton reference meets the limitations of the claims as described above.

The Applicants’ also argue on page 6 that neither Cerna nor Margulis teach or suggest the recited, “converting unit in a television receiver for converting video and audio signals provided from moving picture information from a TV broadcast station into a format compatible with a signal and transmission standard of a mobile radio communication system, wherein the converting unit comprises a coding unit which codes the video and audio signals

Art Unit: 2614

to be compatible with a digital television broadcasting system and formats the coded video and audio signals to be compatible with the mobile radio communication system.”

In response to Applicants’ arguments the Examiner respectfully disagrees with the Applicants because of the response given above for Tracton. Furthermore, the Cerna and Margulis references were not primarily cited in response to the claim limitations argued above. Cerna was used to provide additional teaching regarding adjusting the bandwidth utilization of the network according to telephone call quantity information, as described above, and Margulis was used to provide teaching of broadcasting TV data combined with EPG data to a portable display device. It is well known in the art of television broadcasting to provide EPG data along with the television data or content, and therefore, Margulis is not non-analogous art to Tracton, which discloses the use of television broadcasts in a wireless environment which may include the use of cellular telephones, or Cerna, which is related to dynamically varying the bandwidth used by voice packets according to changing traffic levels.

The Applicants further argue on pages 7-10 that:

...the Office Action fails to make out a *prima facie case* of proper motivation to combine these three references as suggested. As noted above, Tracton is only directed to client-to-server network communications with the disclosed examples directed to office networks and the Internet.

Cerna is only directed to multi-channel telephonic communications systems which makes optimum use of trunk line resources while having an architecture that allows for expansion and without undue multiplicity... Cerna uses a packet switching architecture rather than a routing architecture... Cerna has not disclosed connection to the client-server disclosure of Tracton.

Margulis is directed to a wireless television system... It is non-analogous art to both Tracton and Cerna, neither or which is directed to a wireless TV system.

In response to Applicants' argument that Tracton, Cerna and Margulis are non-analogous art, it has been held that a prior art reference must either be in the field of Applicants' endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Tracton reference clearly teaches that the system may support other architectures, including cellular-phone based browsers, or wireless networks (col. 7, lines 25-27), and the reference teaches scaling source content according to client capabilities, network speed, and other abilities/restrictions (col. 5, lines 7-10 and 58-62). The content is video content (col. 4, lines 33-49), which may include an encoded news broadcast (col. 7, lines 47-48), broadcast at different bit-rates, which may include a television broadcast as described above. The content is delivered to a cellular-phone based browser (col. 7, lines 25-27). Therefore, Tracton clearly teaches varying the rate and transmission bandwidth of video in a cellular phone system. Moreover, the Cerna reference teaches a telecommunication system that uses flow control to dynamically adjust the bandwidth being used by adjusting quality of voice data (col. 7, lines 62-67) in order to prevent a condition where insufficient bandwidth is available resulting in lost data (col. 7, lines 45-49). Further, Cerna discloses data compression and transmission of fax and computer data as well (col. 5, lines 16-20). This packetized and compressed computer data may be packetized and compressed video data as is well known in the art. In summary, Tracton teaches varying an encoding rate of the video signals and a transmission bandwidth of the video signals according to client capabilities, network speed, and other capabilities/restrictions using a cellular phone system, and Cerna

Art Unit: 2614

clearly teaches adjusting the bandwidth utilization of the network according to telephone call quantity information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Tracton reference, which discloses a cellular phone based browser system that may receive a video/television broadcast that is broadcast at a varied encoding rate and transmission bandwidth according to various conditions as described above, with the Cerna reference, which teaches dynamically varying the bandwidth used by voice packets to adjust according to the changing traffic levels or telephone call quantity information, for the advantage of varying an encoding rate of the video signals and a transmission bandwidth of the video signals according to telephone call quantity information. Since both references are related to telephone networks and teach methods of transporting scaled data over digital networks, the art is analogous and combination based on obviousness is proper. In addition to, the Margulis reference clearly discloses a broadcasting service system (See Figure 1) using a mobile communication terminal (158) comprising a digital video and audio input unit (122, 128, 134) which receives digital A/V signals broadcast from a provider of the pertinent information, a transcoding unit for converting the digital video and audio signals into a format and transmission rate agreeable to a mobile communication network (col. 7, lines 36-64) and a transmitting unit (156) for outputting and transmitting the transcoded-converted digital broadcast signals. It is inherent that at least one transmission channel he allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port). More specifically, Margulis further discloses that the broadcasting service system includes EPG and additional data

Art Unit: 2614

converting units that convert EPG data and additional information for selecting the digital broadcast channel into a format agreeable to the mobile network as met by the subsystem processor 518 (col. 4, lines 44-55 and col. 7, lines 36-64). Margulis is evidence that people of ordinary skill in the art would appreciate the benefit of broadcasting TV data combined with EPG data for use in a portable display device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Tracton and Cerna with the television source and EPG data of Margulis in order to allow a user easy access to a wide variety of programming through the use of an EPG when a regular full size screen television device is not accessible or easily portable and a smaller portable display device is being used.

Regarding claim 10, the Applicants argue on pages 10-11 that, "The aforementioned Tracton-Cerna-Margulis reference combination is improper for reasons discussed above, and does not render obvious claim 1, from which claim 10 depends." Moreover, the Applicants argue that, "Peters is not applied to remedy the deficiencies in the aforementioned reference combination."

In response the Examiner repeats the relevant remarks already made above as related to claim 1.

Regarding claims 11, 13-14 and 37, the Applicants' make similar arguments on page 12 as related to the Tracton, Cerna and Margulis reference combination as previously described above.

In response the Examiner respectfully disagrees with the Applicants for the reasons described above.

In addition to, the Applicants argue on pages 12-14 that, Tracton, Cerna, Margulis or Legall does not teach or suggest a, ““TV broadcast digital video and audio signal reception unit and decoder which decodes TV broadcast digital video and audio signals received [from] the TV broadcast digital video and audio signal reception unit,” as recited in the claimed invention.”

In response the Examiner respectfully disagrees with the Applicants because of the remarks made for claim 1 above, in addition to, it is inherent that a device or system that receives TV broadcast digital video and audio signals comprises a decoder. It is well known to those of ordinary skill in the art of digital TV reception that a device or system which receives digital TV broadcast signals must use a decoder in order to process the digital signals for output of the audio and video signals, and/or display of the video signals.

The Applicants further argue that, “Legall contains no disclosure of transmitting television programs and is non-analogous to all three of the references it is used to modify in this rejection.”

In response the Examiner respectfully disagrees with the Applicants because, as previously stated, the Legall reference was not used to provide teaching regarding the transmitting of television programs, but to provide teaching of an EPG system (See Figure 2) where a user is able to search the EPG and other sources of information (col. 2, lines 60-66) by issuing a search request to a search engine, which interacts with external information resources such as the Internet or broadcasts (col. 3, lines 11-16). Further the system is operable to “offload” the handling of a search to the content provider so the

Art Unit: 2614

receiving user's system does not have to perform the search (col. 5, lines 44-46). These features are well known to those of ordinary skill in the art of EPGs as shown by Legall, and therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Tracton in view of Cerna and further in view of Margulis with the EPG searching of Legall in order to allow a user to quickly locate information of interest.

Regarding claims 15, 17-20, 22-25 and 29, the Applicants argue on pages 14-16, as related to the amended independent claims 15, 19, 23 and 29, that, "Margulis and Cerna do not teach or suggest the recited (1) EPG (Electronic Program Guide) data converting unit for converting the EPG data for selecting a digital broadcast channel, in general, or (2) into a format agreeable to the mobile radio communication system, and (3) additional information converting unit for converting additional information of the digital broadcast signals, in general, or (4) into a format agreeable to the mobile raid communication system, as in the claimed invention."

In response the Examiner respectfully disagrees with the Applicants because the Margulis reference clearly discloses a broadcasting service system (See Figure 1) using a mobile communication terminal (158) comprising a digital video and audio input unit (122, 128, 134) which receives digital A/V signals broadcast from a provider of the pertinent information, a transcoding unit for converting the digital video and audio signals into a format and transmission rate agreeable to a mobile communication network (col. 7, lines 36-64) and a transmitting unit (156) for outputting and transmitting the transcoded-converted digital broadcast signals. It is inherent that at least one transmission channel be

Art Unit: 2614

allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port). More specifically, Margulis further discloses that the broadcasting service system includes EPG and additional data converting units that convert EPG data and additional information for selecting the digital broadcast channel into a format agreeable to the mobile network as met by the subsystem processor 518 (col. 4, lines 44-55 and col. 7, lines 36-64).

Similar arguments, as described above for amended independent claims 15, 19, 23 and 29, are reiterated by the Applicants for claims 19, 23 and 29 on pages 15-16, in addition to similar arguments previously made for independent claim 1 as described above, and the Examiner respectfully disagrees for the reasons given above.

Regarding amended independent claim 26, the Applicants argue on pages 17-19, and more specifically on page 17 that, "Margulis, Cerna and Legall do not teach or suggest at least the recited features of converting video and audio data of the selected channel into a format compatible with a standard of the mobile radio communication system, and transmitting the converted data through a certain transmission channel of the mobile radio communication system."

In response the Examiner respectfully disagrees with the Applicants because Margulis discloses a broadcasting service method (See Figure 1) using a mobile communication terminal (158) comprising a digital video and audio input unit (122, 128, 134) which receives digital A/V signals broadcast from a provider of the pertinent information, a transcoding unit for converting the digital video and audio signals into a

Art Unit: 2614

format and transmission rate agreeable to a mobile communication network (col. 7, lines 36-64) and a transmitting unit (156) for outputting and transmitting the transcoded-converted digital broadcast signals. It is inherent that at least one transmission channel be allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port).

The Applicants also argue that the reasons to modify or combine Margulis, in view of Cerna, in further view of Legall, are improper.

In response the Examiner repeats the relevant remarks already made above regarding the use of the Margulis, Cerna and Legall references.

Regarding claims 27-28, the Applicants argue on page 20 that, "These claims depend from claim 26, which is patentable over the Margulis-Cerna-Legall reference combination for the reasons stated above." Moreover, the Applicants argue that, "Peters is not applied to remedy the deficiencies of Margulis and Cerna."

In response the Examiner repeats the relevant remarks already made above as related to claim 26.

Regarding claims 31-35 and 39, and more specifically amended independent claim 32, the Applicants argue on pages 20-22 that, "Margulis, Cerna and Tracton do not teach or suggest at least the recited selecting unit for selecting a TV broadcast signal reception mode and a mobile communication telephone call mode."

In response the Examiner respectfully disagrees with the Applicants because the Tracton reference discloses a mobile A/V reception device as previously described above that may be incorporated into a cellular phone (col. 7, lines 26-28). In addition, in a cellular phone enabled with mobile video reception, a selection means for selecting a broadcast signal mode or a mobile communication telephone call mode is inherent. Tracton provides the evidence or teaching that ordinary workers in the art would recognize the benefits of using a cellular phone platform in a mobile communication subscriber terminal with video reception.

The Applicants also argue on pages 21-22 that the reasons to modify or combine Margulis, in view of Cerna, in further view of Tracton, are improper, and that it would not be obvious to modify the Improper Margulis-Cerna reference combination to use an MPEG 4 format.

In response the Examiner repeats the relevant remarks already made above regarding the use of the Margulis, Cerna and Tracton references. In addition to, the Tracton reference clearly teaches the use of MPEG 4 as described in col. 4, lines 33-49 and col. 7, lines 35-53.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

Or faxed to: 571-273-8300

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2614

applications is available through Private PAIR only. For more information about the PAIR system, see **<http://pair-direct.uspto.gov>**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer
February 21, 2006